

3/28/2018

Print



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit
P0039300	ACI001-VC	3	1	Net 30	M6061T6S4.500X12.000	6061T6 sheet 4.500 X 12.000 (Cut to 20.000") : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				2	3/19/2018	2		S055875	Stock	3/28/2018	\$ 331.76 / ft
		4			MT-4140-B-1.250X6.000	AISI 4140 Steel Bar : Material: AISI 4140 STEEL BAR AS PER ASTM A29, AMS 6349, AMS 6382, AMS 6529, MIL-S-5626 MIN. ROCKWELL C = 28 RC MAX. ROCKWELL C = 32 RC				10	3/28/2018	10		S055876	Stock	3/28/2018	\$ 68.91 / ft
		9			MT-4140-S-1.000X10.000	AISI 4140 Steel Sheet/Plate AISI 4140/4142 STEEL SHEET OR PLATE AS PER ASTM A829/ AMS 6395				6		6		S055877	Stock	3/28/2018	\$ 94.95 / ft
		11			MT-4140-S-1.500X3.000	4140 Steel Bar 1.500 X 3.000 : AISI 4140N STEEL SHEET OR PLATE AS PER ASTM A829 OR AMS 6395 MIN: ROCKWELL C = 28 RC MAX: ROCKWELL C = 32 RC receive ft						6		S055878	Stock	3/28/2018	\$ 87.50 / ft
Total:										24		24					

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO039300

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO039300

PO Date: 3/13/18

Due Date: 3/19/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments: QUOTE NO. SOU0091255, SOU0089404,
SOU0090963, SOU0089881, SOU0089730

RE-PRINT

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
2	M2024T3S.160		2024-T3 .160 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf	Firmed	3/19/18	48 sf	0 sf	48 sf	\$26.190833/sf	\$1,257.16
						48			MAR 23 2018	
3	M6061T6S4.500X12.000		6061T6 sheet 4.500 X 12.000 (Cut to 20.000") : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	3/19/18	1.67 ft	0 ft	2 ft	\$331.76047/ft	\$554.04
						1.67			MAR 28 2018	
									DAS 11 9-89	
Line Item Note 1 PCS CUT AT 20" LONG										
4	MT-4140-B-1.250X6.000		AISI 4140 Steel Bar : Material: AISI 4140 STEEL BAR AS PER ASTM A29, AMS 6349, AMS 6382, AMS 6529, MIL-S-5626 MIN. ROCKWELL C = 28 RC MAX. ROCKWELL C = 32 RC	Firmed	3/28/18	10 ft	0 ft	10 ft	\$68.905/ft	\$689.05
						10			MAR 28 2018	
									11 9-89	

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3/22/2018

PURCHASE ORDER

Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6	MT-A513-T-1.125W0.188		A513 Seamless Alloy Steel Round Tubing 1.25"dia. x 0.188" Wall	Firmed	3/19/18	20 ft	0 ft	20 ft	\$7.25/ft	\$145.00
							21'		MAR 22 2018	
7	M6061T6TS1.000W.120		6061T6 Sq Tube 1.00 X 1.00 X .120W : MATERIAL: 6061-T6 OR 6061-T651/T6510/T6511/T62 SQUARE TUBING AS PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR PER AMS-QQ-A-200/8 OR AMS 4160 receive ft	Forecast	3/19/18	40 ft	0 ft	40 ft	\$1.69025/ft	\$67.61
							42'		MAR 22 2018	
8	M6061T6TS1.250W.120		6061T6 Sq Tube 1.250 X 1.250 X .120W : MATERIAL: 6061-T6 OR 6061-T651/T6510/T6511/T62 SQUARE TUBING AS PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR PER AMS-QQ-A-200/8 OR AMS 4160 receive ft	Forecast	3/19/18	40 ft	0 ft	40 ft	\$1.86125/ft	\$74.45
							42'		MAR 22 2018	
9	MT-4140-S-1.000X10.000		AISI 4140 Steel Sheet/Plate AISI 4140/4142 STEEL SHEET OR PLATE AS PER ASTM A829/ AMS 6395	Firmed	3/28/18	6 ft	0 ft	6 ft	\$94.95333/ft	\$569.72
							6'		MAR 28 2018	
11	Mt-4140-S-1.500X3.000		4140 Steel Bar 1.500 X 3.000 : AISI 4140N STEEL SHEET OR PLATE AS PER ASTM A829 OR AMS 6395 MIN: ROCKWELL C = 28 RC MAX: ROCKWELL C = 32 RC receive ft	Firmed	3/28/18	6 ft	0 ft	6 ft	\$87.50/ft	\$525.00
							6'		MAR 28 2018	
									Grand Total:	\$3,882.03

Order Notes

Procurement Quality Clauses

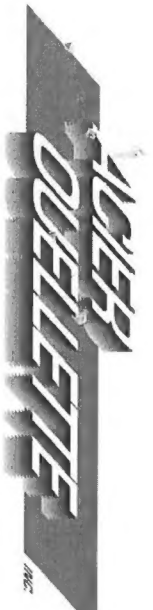
- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 3/22/18 7:20 AM dart.lavoie.chantal



DELIVERY - CLIENT

Copy CO00078596

ACIER OUELLETTE INC.

935, Boul. du Hâvre
Saliaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page 1

Credit Terme

Net 30 Days

Salesman

Processed by

Josianne Bourdon

Carrier

OUELLETTE VALLEYFIELD

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 ALU PLATE 4 1/2 6061-T651 RANDOM PAL-4126061-V 7485 1 X 12" X 20" HEAT: 9401559 AC14385-TH-21/03	107.58	1.67	PI2_\$CLB		1 X 12" X 20"		1.67				

Total Weight (Lbs) : 107.58

NIR : R-109516-6

Conditions :
All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :

Verified By :

Delivered By : Time

Total (\$CAD)

Customer's Signature

Date



DELIVERY - CLIENT

CO00078598

ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

CLI0001056

Date

2018/03/14

Delivery date

2018/03/28

Your order N°

039300

Processed by

Josianne Bourdon

Salesman

OUELLETTE VALLEYFIELD

Carrier

Net 30 Days

Credit Terme

Net 30 Days

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.

HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page

1

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 PLATE 4140 HEAT TREAT 1 1/4 NS P4140-114H 8506 1 X 6" X 120" HEAT: 290604 ACI4333-FU-26/03	255.25	5.00	PI2_\$CLB		14		10				

Total Weight (Lbs) : 255.25

NIR : R-109516-6

DAS

MAR 20 2018

1

Conditions :
All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By : Verified By : Delivered By : Time

50 NM

Customer's Signature

Y M D

Date

Total (\$CAD)



DELIVERY - CLIENT

CO00078591

ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

CLI0001056

Date

2018/03/14

Delivery date

2018/03/28

Your order N°

39300

Processed by

Josianne Bourdon

Salesman

OUELLETTE VALLEYFIELD

Carrier

Net 30 Days

Credit Terme

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.

HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page

1

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 PLATE 4140 HEAT TREAT 1 NS P4140-1H 8796 1 X 10" X 72" HEAT: 297081 ACI4331-FU-26/03	204.20	5.00	PI2_\$CLB		1x10"x72"		61				MAR 28 2018 DAS 11 9-89
2 PLATE 4140 HEAT TREAT 1 1/2 NS P4140-112H 8283 1 X 3" X 72" HEAT: 300188 ACI4331-FU-26/03	2.45	1.50	PI2_\$CLB		1x3"x72"		61				MAR 28 2018 DAS 11 9-89

Total Weight (Lbs) : 206.65

NIR : R-109516-6

Conditions :
All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By : Verified By : Delivered By : Time

MA NM

Customer's Signature Y M D Date

Total (\$CAD)



CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

PECKOVERS 110595165 4061 INCLUSION Serial:20171128-0110595165 Pg 1of3

CUSTOMER PURCHASE ORDER NO. & ITEM PEC-285630				Constellium ORDER NO. 219991		CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA <i>Steve Good</i> Steve Good - Laboratory Manager
ALLOY 6061	CLAD	TEMPER T651	GAUGE 4.50000 in 114.30 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm	
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH						
CUSTOMER SPECIFICATION AMS 4027N						
PART NUMBER			B/L NUMBER 90464	DATE SHIPPED 11/28/2017		
WT. SHIPPED 9445.000 LB		NO. OF PIECES 000003		GOVT. CONTRACT NO.		

ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS:

ASME SB209-15
ASTM B209-14
AMS QQ-A-250/11A

Load Details

Package	Net Lbs	Kg	Lot	Piece	Serial	Parent Lot
1001652549	3,150.000	1,428.815	9401558	01		
1001652549	3,150.000	1,428.815	9401558	02		
1001652636	3,145.000	1,426.547	9401559	01		

Lot: 9401558

Tensile - Room Temperature (US)

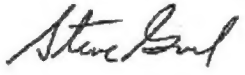
		Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report
Direction	Tests	Min	Max	Min	Max	Min	Max	
LT	02	48.0	48.0	43.6	43.7	11.5	11.5	

Tensile - Room Temperature (SI)

		Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report
Direction	Tests	Min	Max	Min	Max	Min	Max	
LT	02	331	331	301	301	11.5	11.5	

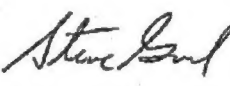


CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

PECKOVERS		110595165		4061		INCLUSION		Serial:20171128-0110595165		Pg 2of3	
CUSTOMER PURCHASE ORDER NO. & ITEM PEC-285630						Constellium ORDER NO. 219991					
ALLOY 6061	CLAD	TEMPER T651	GAUGE 4.50000 in 114.30 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm	CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA  Steve Good - Laboratory Manager					
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH											
CUSTOMER SPECIFICATION AMS 4027N											
PART NUMBER			B/L NUMBER 90464		DATE SHIPPED 11/28/2017						
WT. SHIPPED 9445.000 LB		NO. OF PIECES 000003		GOVT. CONTRACT NO.							
Chemistry (Actual)											
	SI	FE	CU	MN	MG	CR	ZN	TI	ZR		
Core	0.68	0.46	0.31	0.04	1.03	0.20	0.08	0.06	0.00		
OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER											
All material contained in this lot was cast and manufactured in the USA											
Lot: 9401559											
Tensile - Room Temperature (US)											
		Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report			
Direction	Tests	Min	Max	Min	Max	Min	Max				
LT	02	47.6	47.6	43.2	43.4	11.0	11.0				
Tensile - Room Temperature (SI)											
		Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report			
Direction	Tests	Min	Max	Min	Max	Min	Max				
LT	02	328	328	298	299	11.0	11.0				
P-860-155D REVISED: 10 2014											



CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

PECKOVERS		110595165		4061		INCLUSION		Serial:20171128-0110595165		Pg 3of3	
CUSTOMER PURCHASE ORDER NO. & ITEM PEC-285630						Constellium ORDER NO. 219991			CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA  Steve Good - Laboratory Manager		
ALLOY 6061	CLAD	TEMPER T651	GAUGE 4.50000 in 114.30 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm						
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH											
CUSTOMER SPECIFICATION AMS 4027N											
PART NUMBER			B/L NUMBER 90464		DATE SHIPPED 11/28/2017						
WT. SHIPPED 9445.000 LB.		NO. OF PIECES 000003		GOVT. CONTRACT NO.							
Chemistry (Actual)											
	SI	FE	CU	MN	MG	CR	ZN	TI	ZR		
Core	0.71	0.47	0.32	0.06	1.09	0.21	0.10	0.06	0.00		
OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER											
All material contained in this lot was cast and manufactured in the USA											
<p>THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.</p> <p>CHEMISTRY BY OES: ARKSPARK CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399 WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557 DUNS Number: 090570149; CAGE Code: 1YW19</p> <p>Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product. "END OF CERTIFICATION"</p>											
P-860-155D REVISED: 10 2014											

78598
DART

Chemical certification
Certification chimique

Order Num / No. Commande AC-14333	Vendor / Fournisseur 46	Country of origin / Pay d'origine SLOVENIA	Date 12/18/14	Heat / coulée 290604	Material ID # / No. matière
Grade / Nuance 4140 PLT	Conditions HEAT TREATED, Q&T				
Shape / Forme PLT	Size / Dimension 1.250	Specifications ASTM A434 / SAE J404 / ASTM A829-06			

Chemical composition / Analyse chimique

Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)
Mini / maxi 0.3700 / 0.4400	0.1500 / 0.3500	0.6500 / 1.1000	0.0100 / 0.0190
Actuel % 0.417	0.250	0.760	0.009
Sulphur (S)	Chromium (Cr)	Nickel (Ni)	Molybdenum (Mo)
Mini / maxi 0.0200 / 0.0400	0.7500 / 1.2000	0.1000 / 0.2000	0.1500 / 0.2500
Actuel % 0.002	0.970	0.000	0.180
Copper (Cu)	Vanadium (V)	Aluminum (Al)	Tungsten (W)
Mini / maxi 0.1900 / 0.2900	0.0400 / 0.0500	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % 0.000	0.030	0.000	0.000
Cobalt (Co)	Titanium (Ti)		
Mini / maxi 0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % 0.000	0.000	0.000	0.000

Mechanical properties / Propriétés Mécaniques

Yield strenght / Élasticité	Tensile / Rés. à la traction	Elongation / Allon. (%)	Red. of area / Surface (%)	RC	Surface Hd / Dureté
0.000 PSI	0.000 PSI	0.00	0.00		302 BHN

Note:

We certify that the above data has been verified and are conform to an original mill or supplier certificate supplied to us with the material

Nous certifions que les données ci haut on été vérifier et sont conformes d'après un certificat originale qui nous a été fourni par notre fournisseur.

Prepared by: / Préparé par:

10.78591

PO.1453 IN

DART

Chemical certification

Certification chimique

Order Num / No. Commande AC-14331	Vendor / Fournisseur 46	Country of origin / Pay d'origine SLOVENIA	Date 09/10/16	Heat / coulée 297081	Material ID # / No. matière
Grade / Nuance 4140 PLT	Conditions HEAT TREATED Q&T E+ VD				
Shape / Forme FLT	Size / Dimension 1.000	Specifications ASTM A829/A829M			

Chemical composition / Analyse chimique				
Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)	
Mini / maxi 0.3700 / 0.4400	0.1500 / 0.3500	0.6500 / 1.1000	0.0100 / 0.0190	
Actuel % 0.400	0.226	0.804	0.009	
Sulphur (S)	Chromium (Cr)	Nickel (Ni)	Molybdenum (Mo)	
Mini / maxi 0.0200 / 0.0400	0.7500 / 1.2000	0.1000 / 0.2000	0.1500 / 0.2500	
Actuel % 0.001	0.990	0.120	0.160	
Copper (Cu)	Vanadium (V)	Aluminum (Al)	Tungsten (W)	
Mini / maxi 0.1900 / 0.2900	0.0400 / 0.0500	0.0000 / 0.0000	0.0000 / 0.0000	
Actuel % 0.194	0.036	0.034	0.000	
Cobalt (Co)	Titanium (Ti)			
Mini / maxi 0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % 0.000	0.000	0.000	0.000	0.000
Mechanical properties / Propriétés Mécaniques				
Yield strenght / Élasticité	Tensile / Rés. à la traction	Elongation / Allon (%)	Red. of area / Surface (%)	RC
0.000 PSI	0.000 PSI	0.00	0.00	
				Surface Hd / Dureté
				277 BHN

Note:

We certify that the above data has been verified and are conform to an original mill or supplier certificate supplied to us with the material

Nous certifions que les données ci haut ont été vérifiées et sont conformes d'après un certificat originale qui nous a été fourni par notre fournisseur.

Prepared by: / Préparé par:

Chemical certification
Certification chimique

Order Num / No. Commande AC-14331	Vendor / Fournisseur 46	Country of origin / Pay d'origine SLOVENIA	Date 04/28/17	Heat / coulée 300188	Material ID # / No matière
Grade / Nuance 4140 PLT	Conditions HEAT TREATED; Q&T E+VD				
Shape / Forme PLT	Size / Dimension 1.500	Specifications ASTM A829/A829M			

Chemical composition / Analyse chimique

Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)
Mini / maxi 0.3700 / 0.4400	0.1500 / 0.3500	0.6500 / 1.1000	0.0100 / 0.0190
Actuel % 0.400	0.227	0.814	0.008
Sulphur (S)	Chromium (Cr)	Nickel (Ni)	Molybdenum (Mo)
Mini / maxi 0.0200 / 0.0400	0.7500 / 1.2000	0.1000 / 0.2000	0.1500 / 0.2500
Actuel % 0.001	0.970	0.240	0.170
Copper (Cu)	Vanadium (V)	Aluminum (Al)	Tungsten (W)
Mini / maxi 0.1900 / 0.2900	0.0400 / 0.0500	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % 0.178	0.035	0.025	0.000
Cobalt (Co)	Titanium (Ti)		
Mini / maxi 0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % 0.000	0.000	0.000	0.000

Mechanical properties / Propriétés Mécaniques

Yield strenght / Élasticité	Tensile / Rés. à la traction	Elongation / Allon. (%)	Red. of area / Surface (%)	RC	Surface Hd / Dureté
0.000 PSI	0.000 PSI	0.00	0.00		276/286 BHN

Note:

We certify that the above data has been verified and are conform to an original mill or supplier certificate supplied to us with the material

Nous certifions que les données ci haut on été vérifier et sont conformes d'après un certificat originale qui nous a été fourni par notre fournisseur.

Prepared by: / Préparé par:

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T654.500X12.000
 DATE: MAR 28 2018

PO / BATCH NO: 039300/5055875

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 1.67 P¹²
 QUANTITY INSPECTED: 1.67 P¹²
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 4.500
 THICKNESS RECEIVED: 4.500
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	A516 B209
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	Heat # 9401559
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> <u>11</u>	SIGNED OFF BY: _____
DATE: <u>9-89</u> MAR 28 2018	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

APPROVED

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140-B-1.250x6.000
 DATE: MAR 28 2018

PO / BATCH NO: 039300/5055876

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 10
 QUANTITY INSPECTED: 10
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.250
 THICKNESS RECEIVED: 1.250
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
CORROSION	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	<u>Aston 829</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
PHOTO REQUIRED	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	<u>Heat # 290604</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> DATE: <u>9-89 MAR 28 2018</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE
MINIMUM ROCKWELL C = 28 Rc
MAXIMUM ROCKWELL C = 32 Rc

SPECIFICATION:

ASTM A829, AMS 6395

PART NUMBER:

MT-4140-S-(T.TTT) x (W.WWW)
WHERE "T.TTT" = THICKNESS IN INCHES
WHERE "W.WWW" = WIDTH IN INCHES (OPTIONAL FOR SPECIFYING CUT PLATE)

EX. 0.063" THICK SHEET = MT-4140-S-0.063
EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	18-544	18.2.13	VM	ML

DART AEROSPACE		Plymouth, Ontario, Canada	
TITLE AISI 4140 / 4142 STEEL SHEET OR PLATE			
PART NO	REV	A	
MT-4140-S			
TOLERANCES UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS 1/16 1/8 3/16 1/2 3/4 1 DECIMALS .0005 .001 .002 .005 .01 .015 .03 .063 .125 .250 .500 .750 1.000 1.500 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000 10.000 HOLE SIZES .063 .125 .1875 .250 .3125 .375 .500 .625 .750 .875 1.000 1.250 1.500 1.750 2.000 2.250 2.500 2.750 3.000 3.250 3.500 3.750 4.000 4.250 4.500 4.750 5.000 5.250 5.500 5.750 6.000 6.250 6.500 6.750 7.000 7.250 7.500 7.750 8.000 8.250 8.500 8.750 9.000 9.250 9.500 9.750 10.000 HOLE SIZES .063 .125 .1875 .250 .3125 .375 .500 .625 .750 .875 1.000 1.250 1.500 1.750 2.000 2.250 2.500 2.750 3.000 3.250 3.500 3.750 4.000 4.250 4.500 4.750 5.000 5.250 5.500 5.750 6.000 6.250 6.500 6.750 7.000 7.250 7.500 7.750 8.000 8.250 8.500 8.750 9.000 9.250 9.500 9.750 10.000			
DESIGNED BY:	INITIALS AND DATE	VM 2/13/2018	
DRAWN BY:	VM 02/13/2018	FRACTIONS 1/8	
CHECKED BY:	VM 02/13/2018	ANGLES 2.5°	
MFG REVIEW BY:	DD 02/13/2018	SURF FINISH	
APPROVED BY:	ML 02/14/2018	ROUGHNESS	
SCALE: NTS		SHEET 1 OF 1	
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140-5-1.000X10.000

PO / BATCH NO.: 039300/5035877

DATE: MAR 28 2018

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 6'
 QUANTITY INSPECTED: 6'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000
 THICKNESS RECEIVED: 1.000
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORROSION	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input type="radio"/> N	<u>Astm A829</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N	
PHOTO REQUIRED	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N	<u>Heat # 297081</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u> <u>11</u>	SIGNED OFF BY: _____		
DATE: <u>9-89</u> <u>MAR 28 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

EX. 0.063" THICK SHEET = MT-4140-S-0.063
EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

[illegible]

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT4140-3-1.500 X 3.000

PO / BATCH NO.: 039300/5055878

DATE: MAR 28 2018

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 6
 QUANTITY INSPECTED: 6
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500
 THICKNESS RECEIVED: 1.700
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	<u>Aston A829</u>
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	<u>Heat # 300182</u>
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS 11</u>	SIGNED OFF BY: _____		
DATE: <u>9-89 MAR 28 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE
MINIMUM ROCKWELL C = 28 Rc
MAXIMUM ROCKWELL C = 32 Rc

SPECIFICATION: ASTM A829, AMS 6395

PART NUMBER: MT-4140-S-T.TTT x W.WWW
WHERE "T.TTT" = THICKNESS IN INCHES
WHERE "W.WWW" = WIDTH IN INCHES (OPTIONAL FOR SPECIFYING CUT PLATE)

EX. 0.063" THICK SHEET = MT-4140-S-0.063
EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	18-544	18.2.13	VM	ML

DART AEROSPACE		Newmarket, Ontario, Canada	
TITLE AISI 4140 / 4142 STEEL SHEET OR PLATE			
PART NO.	REV		
MT-4140-S	A		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES FRACTIONS SHALL BE IN 16THS OF AN INCH DECIMALS SHALL BE TO 3 PLACES TOLERANCES ARE: FRACTIONS ± 1/16 ANGLES ± 5° SURF FINISH: ROUGHNESS SCALE: NTS SHEET 1 OF 1			
DESIGNED BY: VM 2/13/2018 DRAWN BY: VM 02/13/2018 CHECKED BY: VM 02/13/2018 MFG REVIEW BY: DD 02/13/2018 APPROVED BY: ML 02/14/2018			
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